





The Examiner refers to the embodiment according to Figure 3 in the Phillips reference. Even from Fig. 3 alone, it is clear that only the first partial objective 72 produces an enlarged image with an imaging ratio smaller than 1:1. This can be concluded from the aperture angles of the light rays shown in Fig. 3. In the case of an image reduction the aperture angle increases, while in the case of an image enlargement the aperture angle decreases. The specific numerical values given in the description corroborate this. The Examiner refers to the description of Figure 3, according to which the first subsystem 72 has a magnification of 5.99, while the second subsystem 74 has a magnification of 2.66. To interpret these numbers correctly, one needs to refer to the general description of this type of objective, which is presented in the context of Figure 2 of EP 0 267 766. According to column 9, lines 29 to 31, this type of objective consists of two catoptric reduction imaging subsystems that are “coupled back to back at their nominal image planes 46 and 48, respectively.” Thus, only the first subsystem actually operates as a reduction objective, while the second subsystem, being installed with reverse orientation, operates as a magnifying objective. As disclosed further in column 9, lines 43 to 48, the overall magnification ratio of the objective is the ratio of the magnification of the first subsystem divided by the magnification of the second subsystem. While one would normally expect an overall magnification ratio to be the multiplication product of the subsystem magnification ratios, the unusual way of calculating the overall magnification ratio as the quotient of the subsystem ratios is correct in the case of the Phillips reference for the reason that the second partial objective was installed with reverse orientation, i.e., with the image plane rather than the object plane of the second partial objective being located in the intermediate image.

If the term “imaging ratio” is defined according to the present application, the embodiment according Phillips’ Figure 3 has an imaging ratio of 5.99 : 1 (i.e., larger than 1 : 1) for the first partial objective, while the second partial objective has an imaging ratio of 1 : 2.66 which equals a ratio of 0.376 : 1 (i.e., smaller than 1 : 1).



Applicants appreciate that the Examiner found claims 31, 32, 34-36 and 38-43 to be conditionally allowable, i.e., objected to as being dependent upon a rejected base claim, but allowable if rewritten in dependent form. With regard to claims 31, 32 and 34-36, applicants respectfully submit that they should be allowed without being rewritten, as their base claim 29 should be allowable based on the argument presented above. Claims 38-43 should be allowable because their base claim 37 (as amended herein) should be allowable.

In addition, claims 38 and 40 are presented herein in independent form as claims 44, 47 (new) and should be allowable according to the Examiner's finding. Claims 45, 46 (new) should be allowed as being dependent on claim 44.

In conclusion, applicants respectfully submit that all issues of the Office Action of July 22, 2004 have been addressed and that the pending claims 1-47 have been shown to be allowable based on the present amendment and the foregoing remarks and arguments. Allowance of the application with all of the pending claims 1-47 is respectfully requested.

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Respectfully submitted,

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